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AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A substrate providing an optical waveguide and having steps for positioning formed on at least one side thereof An optical module comprising:

an optical waveguide having multiple cores buried in a clad;

a rectangular-shaped silicon optical waveguide substrate, on which said optical waveguide is mounted, and on both sides of an upper surface thereof high precision steps are formed along a longitudinal direction of the waveguide substrate; and

an optical fiber connecting end member including guide pin insertion holes for inserting guide pins and a through hole for accommodating and fixing an end surface of the optical waveguide substrate.

wherein on an inside of the through hole, steps are formed so as to fit the high precision steps when the waveguide substrate is inserted in the through hole.

- (Original) A substrate according to claim 1 wherein an optical element is mounted on and connected to said optical waveguide.
- 3. (Original) A substrate according to claim 1 wherein inclined grooves that incline relative to the propagation direction of the light are formed on said optical waveguide, and a light reflecting device that reflects light propagated along said optical waveguide to the outside of said optical waveguide is provided on said inclined grooves.



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- 4. (Original) A substrate according to claim 1 wherein inclined grooves that incline relative to the propagation direction of the light are formed on said optical waveguide, and an optical wavelength selecting device that selects the light having a wavelength in a desired range from the light propagated through said optical waveguide and extracts it to the outside of said optical waveguide is provided on said inclined groove.
- 5. (Original) A substrate having optical elements mounted thereon, and steps for positioning formed on at least one side thereof.
- 6. (Original) An optical fiber connecting end member having formed therein a hole for accommodating and fixing one end of said substrate and optically connecting the substrate to the optical fiber, wherein steps for positioning said substrate are formed on the substrate in said hole.
- 7. (Original) An optical element housing member having formed therein a hole for accommodating and fixing one or the other end of said substrate and optically connecting the substrate to an optical element, wherein steps for positioning said substrate are formed in said hole.
- 8. (Previously Presented) An optical module including the substrate according to claim 1 and an optical fiber connecting end member having formed therein a hole for accommodating and fixing one end of said substrate and optically connecting the substrate to the optical fiber, wherein steps for positioning said substrate are formed on the substrate in said hole.

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- 9. (Original) An optical module according to claim 8 wherein two of said optical fiber connecting end members are disposed opposite to each other so as to sandwich said optical element housing member, and said substrate on which said optical fiber connecting end member is accommodated and fixed is optically connected to the optical element of said optical element housing member.
- 10. (Original) An optical module according to claims 8 wherein said substrate is pressed against the optical fiber connecting end member by the elastic force of an elastic member.
- 11. (Original) A fabrication method for the substrate according to claims 1 wherein steps for positioning are formed on at least one side of said substrate by anisotropic etching.
- 12. (Previously Presented) An optical module including the substrate according to claim 1 and an optical element housing member having formed therein a hole for accommodating and fixing one or the other end of said substrate and optically connecting the substrate to an optical element, wherein steps for positioning said substrate are formed in said hole.

